

Please amend this application as follows:

In the Specification:

Please amend the Abstract as follows (the changes in these Claims are shown with ~~strikethrough~~ for deleted matter and underlines for added matter).

A hands-free device includes a sensor, a motor, a pilot valve assembly, a gear train, an arm, and an override control, and an electronic detent. Preferably, the ~~The~~ motor opens the pilot valve ~~valve assembly allows a fluid to flow when an activation signal is received from the sensor.~~ Preferably, the ~~The~~ override control arm is coupled to the ~~pilot valve assembly gear train, and the override control is coupled to the arm.~~ The override control is capable of moving the arm between a locked and unlocked configuration. ~~allows a continuous flow of fluids through an outlet port beyond the predetermined period of time.~~ A method of controlling a continuous flow of water through a proximity faucet ~~includes selecting a mode that allows water to flow continuously through a proximity sensor; locking a valve assembly to allow the water to flow beyond a period of time programmed within the proximity sensor; and providing an automatic and a mechanical system to discontinue the continuous flow of water.~~

Please delete Paragraphs 8 and 37. Please amend Paragraphs 7, 27, 36, 41, and 43 of the Specification as follows (the changes in these Claims are shown with ~~strikethrough~~ for deleted matter and underlines for added matter).

[0007] A hands-free embodiment comprises a sensor, , a motor ~~a pilot valve assembly, a gear train, an arm, and an override control, and an electronic detent.~~ Preferably, the ~~motor opens the pilot valve when an activation signal is received from the sensor.~~ ~~pilot valve assembly allows a fluid to flow for a predetermined period of time when an activation signal is received from the sensor.~~ Preferably, the ~~override control arm~~ is coupled to the ~~pilot valve assembly gear train, and the override control is coupled to the arm.~~ In one embodiment, the override control is capable of moving the arm between a locked and unlocked configuration. ~~allows a continuous flow of fluids through an outlet port beyond the predetermined period of time.~~

[0008] A method of controlling a continuous flow of water through a proximity faucet embodiment includes selecting a mode that allows water to flow continuously through a proximity sensor; locking a valve assembly to allow the water to flow beyond a period of time programmed within the proximity sensor; and providing an automatic and a mechanical system to discontinue the continuous flow of water.

[0027] Preferably, the mixing housing 602 106 is coupled to the valve housing 104 by a valve adapter 502. As shown, the valve adapter 502 comprises a cylinder having a keyway 702 and threads 704 at one end as shown in figure 7. When secured to the valve housing 104, a valve pin 706 seats within the keyway 702 providing a seal between the valve housing 104 and the valve adapter 502. An O-ring 708 preferably provides a positive fluid tight seal between the valve housing 104 and the valve adapter 502. An axial filter 710 can be disposed within the valve plug 502 to separate fluids from particulate matter flowing from the mixing valve 602 to the valve housing 104 or valve assembly. The filter 710 shown in figure 7 comprises a mesh or a semi-permeable membrane. In another embodiment other materials that selectively pass fluids without passing some or all contaminants can be used as a filter.

[0036] Preferably, an override knob 738 shown in figure 7 is coupled to an override shaft 740 724 projecting from the override arm 724. In this embodiment, when the override knob 738 is turned counter-clockwise, the gear train 712 rotates until a projection 740 on the override arm 724 strikes the substantially linear side surface 736 of stem 726 the strike plate 730. In this position, the pressure on the underside of the diaphragm 610 will be greater than that on the inlet side, and the valve will be open.

[0037] Preferably, an electronic detent locks the movement of the shaft 732 until the sensor 108 detects a user or the override knob 738 is manually turned to another mode. When the sensor 108 detects a user, the valve remains open. When the user is no longer detected, which can occur when the sensor 108 no longer senses an appendage, the hands free embodiment automatically returns to its automatic mode. As the hands free embodiment transitions from the open to the automatic mode, the override knob 738 will automatically rotate from the open to the

~~auto marking on the housing. In this embodiment, hands free fixtures are continuously flushed by an uninterrupted fluid flow that is shut off by a sensor 108 detection after a manual selection.~~

[0041] Furthermore, the detent is not limited to override control disclosed. ~~an electronic detent that can be unlocked by an activation signal sourced by a sensor~~. The electronic detent can be ~~an electronic detent, comprising~~ a programmable timing device that sustains an uninterrupted fluid flow for an extended period of time. Moreover, the ~~hands free system and method~~ can also embrace other mechanical detents, for example, that lock movement of the motor 604 or the gear train 712 and/or the shaft 732. One such embodiment can comprise a catch lever that seats within a channel of the spur gear 728 of the gear train 712. Preferably, the torque of the motor 604 and/or a manual pressure can unlock some of these embodiments.

[0043] In yet another alternative embodiment, the limits of travel of the pilot ~~626~~ 614 can be defined by the contacts between the override arm 724 and the convex surfaces of the strike plate 730. At one end of this embodiment, the override arm 724 strikes a positive moderate sloping side surface 734 of the strike plate 730 and at another end the override arm 724 strikes a substantially linear side surface 736. In another alternative, pilot 614 movement causes the pilot supply air 804 shown in figure 8 to be vented to the atmosphere which unseats the diaphragm 610 allowing fluid to flow from the inlet to the outlet port 618 and 620. In this embodiment, the fluid which comprises a substance that moves freely but has a tendency to assume the shape of its container will flow continuously until the venting is closed. Once the vent is closed, a backpressure builds up on the diaphragm 610 closing the outlet port 620.